



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF WATER SUPPLY

DISINFECTANT MONITORING AND MRDL COMPLIANCE REPORT

PWSID #		ENTRY POINT	PUBLIC WATER SYSTEM NAME AND ADDRESS
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		<input type="text"/>	_____
SAMPLE PERIOD			
START DATE	END DATE		_____
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		_____
m m d d y y	m m d d y y		

I. SYSTEMS USING CHLORINE OR CHLORAMINES <sup>(1)</sup>

**A. Distribution System Monitoring**

Number of Samples Required <sup>(1)</sup>	Number of Samples Taken	Lowest Residual Measured (mg/L)	Average Residual Measured (mg/L)	Number of Samples below 0.2 mg/L	% of Samples 0.2 mg/L or higher
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>

**B. Entry Point Monitoring (For Sub Part H Systems <sup>(2)</sup> Only)**

Number of Days Residual Measurements Required <sup>(3)</sup>	Type of Monitoring Conducted	Lowest Residual Measured Entering the D.S.	Was the Continuous Chlorine Analyzer out of service more than 5 consecutive days while this facility was in operation?
<input type="text"/> <input type="text"/>	Grab <input type="text"/> Continuous <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/> mg/L	<input type="text"/> ("Y" for yes, or "N" for no)

II. SYSTEMS USING CHLORINE DIOXIDE

**A. Entry Point Monitoring**

Number of Days Residual Measurements Required	Highest Residual Measured Entering the D.S.	Number of Days Residual Measured > MRDL	Number of Consecutive Days Residual Measured > MRDL
<input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/> mg/L	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

**B. Distribution System Monitoring**

**1. Systems Not Utilizing Disinfection Booster Stations**

Date E.P. Sample Exceeded MRDL	Date of Follow-Up Sampling <sup>(4)</sup>	Time of First Sample	Time of Second Sample	Time of Third Sample
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
		Result (mg/L)	Result (mg/L)	Result (mg/L)
		<input type="text"/> . <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>

**2. Systems Utilizing Disinfection Booster Stations**

Date E.P. Sample Exceeded MRDL	Date Follow-Up Sampling <sup>(5)</sup>	Closest Customer	Average Point	Maximum Residence Time
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>	<input type="text"/> . <input type="text"/> <input type="text"/>

- Notes:
- (1) Disinfection residuals must be measured at the same frequency and locations that total coliform samples are taken.
  - (2) Subpart H Systems are public water systems that treat surface water and/or ground water under the direct influence of surface water.
  - (3) Disinfection residuals must be measured continuously for chlorine for systems serving more than 3,330 persons at the entry point to the distribution system each day of operation. Grab sampling may be conducted at the rate specified in the regulations for systems serving less than 3,300.
  - (4) For systems using chlorine dioxide, and not utilizing booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at a point closest to the first customer at six-hour intervals. Analysis must be by Ion Chromatography.
  - (5) For systems using chlorine dioxide, and which utilize booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at the following locations: 1) a point closest to the first customer, 2) a point reflecting the average residence time, and, 3) a point reflecting the maximum residence time. Analysis must be by Ion Chromatography.

I CERTIFY THAT THE INFORMATION LISTED ON THIS FORM ACCURATELY CORRESPONDS TO THE OPERATION OF THIS FACILITY FOR THE REPORTING PERIOD SPECIFIED HEREIN.

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_ APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

## **Instructions**

### **I. Systems Using Chlorine or Chloramines**

#### **A. Distribution System Monitoring**

Number of Samples Required:	See Note 1 Above.
Number of Samples Taken:	See Note 1 Above.
Lowest Residual:	Enter the lowest residual measured from all distribution system measurements.
Average Residual:	Enter the arithmetic average residual calculated from all distribution system measurements.
Number below 0.2 mg/L:	Enter the number of residual measurements below 0.2 mg/L.
% of Samples 0.2 mg/L or higher:	Enter the calculated percentage of measurements that were 0.2 mg/L or higher. Example: 35 measurements above 0.2 mg/L divided by 40 measurements = 87.5 %.

#### **B. Entry Point Monitoring**

Number of Days Residual Measurements Required:	Disinfectant residual must be measured at the entry point each day facility in operation.
Type of Monitoring Conducted	Place a "X" in the box below either grab or continuous to indicate the type of disinfection monitoring conducted on finished water leaving the treatment facility.
Number of Days Residual Measurements Taken:	Enter actual number of days the disinfectant residual was measured.
Lowest Residual Entering D.S.:	Enter the lowest residual measured entering the distribution system.
Number of Days Continuous Monitoring Operated:	Enter the number of days continuous disinfection monitoring equipment operated.
Number of Days Continuous Monitoring Out of Service:	Enter the number of days continuous disinfection monitoring equipment was out of service.

### **II. Systems Using Chlorine Dioxide**

#### **A. Entry Point Monitoring**

Number of Days Residual Measurements Required:	Disinfectant residual must be measured at the entry point each day facility in operation.
Number of Days Residual Measurements Taken:	Enter actual number of days the disinfectant residual was measured.
Highest Residual Entering D.S.:	Enter the highest disinfectant residual measured entering the distribution system.
Number of Days Residual > MRDL:	Enter the number of days the residual measurement exceeded the MRDL of 0.8 mg/L.
Number of Consecutive Days: Residual > MRDL:	Enter the number of consecutive days the residual measurement exceeded the MRDL of 0.8 mg/L.

#### **B. Distribution System Monitoring**

##### **1. Systems Not Using Booster Stations**

Date E.P. Sample Exceeded MRDL:	Enter the date the disinfectant residual entering the distribution system exceeded the MRDL of 0.8 mg/L.
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Date of Follow-Up Sampling	Enter the date follow-up sampling occurred.
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Sample Times and Results:	Follow-up sampling must be taken the day after a MRDL exceedance, and must be taken at six-hour intervals at the closest customer to the treatment facility.
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##### **2. Systems Using Booster Stations**

Date E.P. Sample Exceeded MRDL:	Enter the date the disinfectant residual entering the distribution system exceeded the MRDL of 0.8 mg/L.
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Date of Follow-Up Sampling:	Enter the date follow-up sampling occurred.
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Sample Locations and Results:	Follow-up sampling must be taken the day after a MRDL exceedance, and must be taken at the following locations: closest customer, average residence time, and at the maximum residence time (end of distribution system).
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